OM nucleic - nucleic search, using sw model

Run on: February 21, 2005, 09:37:08; Search time 11131 Seconds

(without alignments)

11583.805 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 2661

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4708233 seqs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : GenEmbl:\*

1: gb ba:\*

2: gb htg:\*

3: gb\_in:\*

4: gb om:\*

5: gb ov:\*

6: gb\_pat:\*

7: gb ph:\*

8: gb pl:\*

9: gb pr:\*

10: gb ro:\*

11: gb sts:\*

12: gb sy:\*

13: gb\_sy.

14: gb\_vi:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	% Query Match	Length	DB	ID	Description
1 2	2650 2547.8	99.6 95.7		-	AF322909 AR018808	AF322909 Homo sapi AR018808 Sequence
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	4	2547.8	95.7	2669	6	CQ776677	CQ776677 Sequence
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	6	2547.8	95.7	2669	9	HSNMB	X76534 H.sapiens N
	7	2533.6	95.2	2658	6	CQ727007	CQ727007 Sequence
	8	2522	94.8	2787	9	BC032783	BC032783 Homo sapi
	9	2485	93.4	2683	6	AX358788	AX358788 Sequence
	10	2485	93.4	2683	6	AX362281	AX362281 Sequence
	11	2485	93.4	2683	9	AY359124	AY359124 Homo sapi
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	13	1051.2	39.5	2282	10	BC061725	BC061725 Rattus no
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DEFINITION Homo sapiens transmembrane glycoprotein HGFIN mRNA, complete cds.
ACCESSION
           AF322909
           AF322909.1 GI:11993664
VERSION
KEYWORDS
SOURCE
           Homo sapiens (human)
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ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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REFERENCE
           Bandari, P.S., Qian, J., Yehia, G., Joshi, D.D., Maloof, P.B.,
 AUTHORS
           Potian, J., Oh, H.S., Gascon, P., Harrison, J.S. and Rameshwar, P.
 TITLE
           Hematopoietic growth factor inducible neurokinin-1 type: a
           transmembrane protein that is similar to neurokinin 1 interacts
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 JOURNAL
           Regul. Pept. 111 (1-3), 169-178 (2003)
           22498106
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REFERENCE
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              (bases 1 to 2662)
           Rameshwar, P.
 AUTHORS
           Direct Submission
 TITLE
 JOURNAL
           Submitted (20-NOV-2000) Medicine, UMDNJ-New Jersey Medical School,
           185 South Orange Ave, MSB, Rm. E-579, Newark, NJ 07103, USA
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 Query Match
                        100.0%; Pred. No. 0;
 Best Local Similarity
 Matches 2661; Conservative
                              0; Mismatches
                                                0;
                                                   Indels
                                                             1;
                                                                 Gaps
                                                                        1;
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             Db
           1 CGGCACGAGGGCCCAGAGGAATAAGTTAACCTTGGTGCCTGCGTCCGTGAGAATTCAGCA 60
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Qу
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Db	841	TTATGTTTGATGTCCTGATTCATGATCCTAGCCACTTCCTCAATTATTCTACCATTAACT	900
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Db	961	ACACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGCACCAG	1020
Qу	1020	GACCTTGTCCGCCACCGCCACCACCACCAGACCTTCAAAACCCACCC	1079

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Qу	1260	TCGTGACCTGCCAAGGGAGCATTCCCACGGAGGTCTGTACCATCATTTCTGACCCCACCT	1319
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Qу	1320	GCGAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGAGATGTGTCTGCTGA	1379
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Qу	1500	CTTTAAGGATGGCAAACAGTGCCCTGATCTCCGTTGGCTGCTTGGCCATATTTGTCACTG	1559
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Qy	1800	GTGGCTATTAACCTTTTTTTCCTAAAGATTATTGTTAAATAGATATTGTGGTTTTGGGGAA	1859
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QУ	1860	GTTGAATTTTTTATAGGTTAAATGTCATTTTAGAGATGGGGAGAGGGATTATACTGCAGG	1919
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Qу	1920	CAGCTTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGCTTCTTTTCATTATT	1979
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RESULT 2 AR018808

LOCUS AR018808 2669 bp DNA linear PAT 05-DEC-1998

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VERSION
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 ORGANISM
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        Unclassified.
           (bases 1 to 2669)
REFERENCE
 AUTHORS
        Thompson, T.C.
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 JOURNAL
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DEFINITION

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Db	900	CTAGCCACTTCCTCAATTATTCTACCATTAACTACAAGTGGAGCTTCGGGGATAATACTG	959
Qу	927	GCCTGTTTGTTTCCACCAATCATACTGTGAATCACACGTATGTGCTCAATGGAACCTTCA	986
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Qу	987	GCCTTAACCTCACTGTGAAAGCTGCAGCACCAGGACCTTGTCCGCCACCGCCACCACCAC	1046
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Qy		GCCCTGTGGATGTGGATGAGATGTGTCTGCTGACTGTGAGACGAACCTTCAATGGGTCTG	
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Qy	1587	ACAAGGAATACAACCCAATAGAAAATAGTCCTGGGAATGTGGTCAGAAGCAAAGGCCTGA	1646
Db	1620	ACAAGGAATACAACCCAATAGAAAATAGTCCTGGGAATGTGGTCAGAAGCCAAAGGCCTGA	1679
Qу	1647	GTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTTCCCGGGAAACCAGGAAAAGGATCCGC	1706
Db	1680	GTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTTCCCGGGAAACCAGGAAAAGGATCCGC	1739
Qу	1707	TACTCAAAAACCAAGAATTTAAAGGAGTTTCTTAAATTTCGACCTTGTTTCTGAAGCTCA	1766
Db	1740	TACTCAAAAACCAAGAATTTAAAGGAGTTTCTTAAATTTCGACCTTGTTTCTGAAGCTCA	1799
Qу	1767	CTTTTCAGTGCCATTGATGTGAGATGTGCTGGAGTGGCTATTAACCTTTTTTTCCTAAAG	1826
Db	1800	CTTTTCAGTGCCATTGATGTGAGATGTGCTGGAGTGGCTATTAACCTTTTTTTCCTAAAG	1859
ΟУ	1827	ATTATTGTTAAATAGATATTGTGGTTTGGGGAAGTTGAATTTTTT	1886
Db	1860	ATTATTGTTAAATAGATATTGTGGTTTGGGGAAGTTGAATTTTTT	1919
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Qу	1947	AAAAGCAACTTAGCAAGGCTTCTTTTCATTATTTTTTTTT	2006
Db	1980	AAAAGCAACTTAGCAAGGCTTCTTTTCATTATTTTTTTTT	2039
QΥ	2007	GTAACTAGTAGGATAGAAACACTGTGTCCCGAGAGTAAGGAGAGAAGCTACTATTGATTA	2066
Db		GTAACTAGTAGGATAGAAACACTGTGTCCCGAGAGTAAGGAGAGAAGCTACTATTGATTA	
QУ	2067	GAGCCTAACCCAGGTTAACTGCAAGAAGAGGCGGGATACTTTCAGCTTTCCATGTAACTG	2126
Db	2100	GAGCCTAACCCAGGTTAACTGCAAGAAGAGGCGGGATACTTTCAGCTTTCCATGTAACTG	2159
QУ		TATGCATAAAGCCAATGTAGTCCAGTTTCTAAGATCATGTTCCAAGCTAACTGAATCCCA	
Db	2160	TATGCATAAAGCCAATGTAGTCCAGTTTCTAAGATCATGTTCCAAGCTAACTGAATCCCA	2219
QУ		CTTCAATACACACTCATGAACTCCTGATGGAACAATAACAGGCCCAAGCCTGTGGTATGA	
Db	2220	CTTCAATACACACTCATGAACTCCTGATGGAACAATAACAGGCCCAAGCCTGTGGTATGA	2279
Qу	2247	TGTGCACACTTGCTAGACTCAGAAAAATACTACTCTCATAAATGGGTGGG	2306

Db	2280	TGTGCACACTTGCTAGACTCAGAAAAAATACTACTCTCATAAATGGGTGGG
QУ	2307	GTGACAACCTACTTTGCTTGGCTGAGTGAAGGAATGATATTCATATATTCATTTATTCCA 2366
Db	2340	GTGACAACCTACTTTGCTTGGCTGAGTGAAGGAATGATATTCATATATTCATTTATTCCA 2399
QУ	2367	TGGACATTTAGTTAGTGCTTTTTATATACCAGGCATGATGCTGAGTGACACTCTTGTGTA 2426
Db	2400	TGGACATTTAGTTAGTGCTTTTTATATACCAGGCATGATGCTGAGTGACACTCTTGTGTA 2459
QУ	2427	TATTTCCAAATTTTTGTATAGTCGCTGCACATATTTGAAATCAAAATATTAAGACTTTCC 2486
Db	2460	TATTTCCAAATTTTTGTATAGTCGCTGCACATATTTGAAATC-ATATATTAAGACTTTCC 2518
QУ	2487	AAAAATTTGGTCCCTGGTTTTTCATGGCAACTTGATCAGTAAGGATTTCCCCTCTGTTTG 2546
Db	2519	AAAGATGAGGTCCCTGGTTTTCATGGCAACTTGATCAGTAAGGATTTCACCTCTGTTTG 2578
Qу	2547	GAACTAAAACCATTTACTATATGTTAGACAAGACATTTTTTTT
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Qy	2607	-AAAATGAGGGAAGAGACAAAAAAAAAAAA 2636
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OM nucleic - nucleic search, using sw model

February 21, 2005, 08:39:53; Search time 1308 Seconds Run on:

(without alignments)

12043.143 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 2661

Sequence: 

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

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Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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> 1: geneseqn1980s:\* 2: geneseqn1990s:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	2661	100.0	2661	6	ABQ78551	Abq78551 Nucleotid
2	2571.2	96.6	2845	12	ADQ22838	Adq22838 Human sof
3	2559.2	96.2	2952	11	ACN89693	Acn89693 Breast ca
4	2547.8	95.7	2669	2	AAT69328	Aat69328 Murine me
5	2547.8	95.7	2669	2	AAT69318	Aat69318 Murine me
6	2547.8	95.7	2669	3	AAC55715	Aac55715 Human NMB
7	2547.8	95.7	2669	6	ABQ88185	Abq88185 Human ost
8	2547.8	95.7	2669	8	ABX76321	Abx76321 Lung canc
9	2547.8	95.7	2669	10	ADL14996	Adl14996 Human NMB
10	2547.8	95.7	2669	11	ADN39723	Adn39723 Cancer/an
11	2547.8	95.7	2669	12	ADJ75111	Adj75111 Marker ge
12	2547.8	95.7	2669	12	ADQ18309	Adq18309 Human sof
13	2547.8	95.7	2669	13	ADR24918	Adr24918 Breast ca
14	2547.8	95.7	2669	13	ADP23126	Adp23126 PRO polyp
15	2547.8	95.7	2669	13	ADR66172	Adr66172 Human pro
16	2547.8	95.7	2669	13	ADR66150	Adr66150 Human pro
17	2531.6	95.1	2666	10	ADJ56363	Adj56363 Human cDN
18	2505.6	94.2	2728	10	ADD78274	Add78274 Human CGD
19	2485	93.4	2683	6	ABK33556	Abk33556 cDNA enco
20	2485	93.4	2683	8	ACA68517	Aca68517 Novel hum
21	2485	93.4	2683	9	ABT44246	Abt44246 Human PRO
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34	2485	93.4	2683	10	ADB72932	Adb72932 Novel hum
35	2485	93.4	2683	10	ADC36770	Adc36770 Human PRO
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37
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            93.4
                  2683 10 ADC49791
                                                     Adc49791 Novel hum
38
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            93.4
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XX
AC
     ABQ78551;
XX
     25-NOV-2002 (first entry)
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XX
     Nucleotide sequence of human HGFIN.
DE
XX
KW
     Human; cell differentiation; white blood cell; bone marrow cell;
     haematopoietic growth factor inducible neurokin-1; HGFIN;
KW
     progenitor proliferation; acute myeloid leukemia; non-Hodgkin's disease;
KW
     acute lymphocytic leukemia; chronic myeloid leukemia;
KW
KW
     chronic lymphocytic leukemia; Hodgkin's disease; gene; ss.
XX
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XX
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XX
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PD
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XX
     20-OCT-2001; 2001WO-US050204.
PF
XX
PR
     20-OCT-2000; 2000US-0241881P.
XX
PΑ
     (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.
XX
PΙ
     Pranela R;
XX
     WPI; 2002-657531/70.
DR
     P-PSDB; ABB78200.
DR
XX
     Hematopoietic growth factor inducible neurokin-1 type polypeptide and
PT
     polynucleotide for treating a disease associated with abnormal bone
PT
PT
     marrow cell differentiation or proliferation, e.g. leukemia.
XX
```

```
PS
    Claim 2; Page 121-123; 125pp; English.
XX
CC
    The present sequence encodes human haematopoietic growth factor inducible
    neurokin-1 type (HGFIN) polypeptide. HGFIN induces white blood cell
CC
    differentiation and inhibits progenitor proliferation. HGFIN polypeptides
CC
    and polynucleotides are useful for treating a disease associated with
CC
CC
    abnormal bone marrow cell differentiation or proliferation, especially
    acute myeloid leukemia, acute lymphocytic leukemia, chronic myeloid
CC
    leukemia, chronic lymphocytic leukemia, Hodgkin's and non-Hodgkin's
CC
CC
    disease
XX
SQ
    Sequence 2661 BP; 772 A; 586 C; 587 G; 716 T; 0 U; 0 Other;
 Query Match
                    100.0%; Score 2661; DB 6;
                                           Length 2661;
 Best Local Similarity
                    100.0%; Pred. No. 0;
 Matches 2661; Conservative
                          0; Mismatches
                                        0;
                                           Indels
                                                   0;
                                                       Gaps
                                                             0;
         1 CGGCACGAGGGCCCAGAGGAATAAGTTAACCTTGGTGCCTGCGTCCGTGAGAATTCAGCA 60
Qу
           1 CGGCACGAGGGCCCAGAGGAATAAGTTAACCTTGGTGCCTGCGTCCGTGAGAATTCAGCA 60
Db
        61 TGGAATGTCTCTACTATTTCCTGGGATTTCTGCTCCTGGCTGCAAGATTGCCACTTGATG 120
Qy
           61 TGGAATGTCTCTACTATTTCCTGGGATTTCTGCTCCTGGCTGCAAGATTGCCACTTGATG 120
Db
        121 CCGCCAAACGATTTCATGATGTGCTGGGCAATGAAAGACCTTCTGCTTACATGAGGGAGC 180
Qу
           121 CCGCCAAACGATTTCATGATGTGCTGGGCAATGAAAGACCTTCTGCTTACATGAGGGAGC 180
Db
        181 ACAATCAATTAAATGGCTGGTCTTCTGATGAAAATGACTGGAATGAAAAACTCTACCCAG 240
Qу
           181 ACAATCAATTAAATGGCTGGTCTTCTGATGAAAATGACTGGAATGAAAAACTCTACCCAG 240
Db
        241 TGTGGAAGCGGGGAGACATGAGGTGGAAAAACTCCTGGAAGGGAGGCCGTGTGCAGGCGG 300
Qу
           241 TGTGGAAGCGGGGAGACATGAGGTGGAAAAACTCCTGGAAGGGAGGCCGTGTGCAGGCGG 300
Db
        301 TCCTGACCAGTGACTCACCAGCCCTCGTGGGCTCAAATATAACATTTGCGGTGAACCTGA 360
Qy
           301 TCCTGACCAGTGACTCACCAGCCCTCGTGGGCTCAAATATAACATTTGCGGTGAACCTGA 360
Db
        361 TATTCCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAAGAACTGCA 420
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           361 TATTCCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAAGAACTGCA 420
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Qу
           421 GAAATGAGGCTGGTTTATCTGCTGATCCATATGTTTACAACTGGACAGCATGGTCAGAGG 480
Db
        481 ACAGTGACGGGGAAAATGGCACCGGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAAC 540
Qу
           481 ACAGTGACGGGGAAAATGGCACCGGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAAC 540
Db
        541 CTTTTCCTCACCACCCCGGATGGAGAAGATGGAATTTCATCTACGTCTTCCACACACTTG 600
Qу
           Db
        541 CTTTTCCTCACCACCCCGGATGGAAGATGGAATTTCATCTACGTCTTCCACACACTTG 600
```

QУ	601	GTCAGTATTTCCAGAAATTGGGACGATGTTCAGTGAGAGTTTCTGTGAACACAGCCAATG	660
Db	601		660
Qу	661	TGACACTTGGGCCTCAACTCATGGAAGTGACTGTCTACAGAAGACATGGACGGGCATATG	720
Db	661	TGACACTTGGGCCTCAACTCATGGAAGTGACTGTCTACAGAAGACATGGACGGGCATATG	720
Qy	721	TTCCCATCGCACAAGTGAAAGATGTGTACGTGGTAACAGATCAGATTCCTGTGTTTGTGA	780
Db	721		780
Qy	781	CTATGTTCCAGAAGAACGATCGAAATTCATCCGACGAAACCTTCCCAAAGATCTCCCCAT	840
Db	781		840
Qy	841	TATGTTTGATGTCCTGATTCATGATCCTAGCCACTTCCTCAATTATTCTACCATTAACTA	900
Db	841		900 ·
Qy	901	CAAGTGGAGCTTCGGGGATAATACTGGCCTGTTTGTTTCCACCAATCATACTGTGAATCA	960
Db	901	CAAGTGGAGCTTCGGGGATAATACTGGCCTGTTTGTTTCCACCAATCATACTGTGAATCA	960
Qy	961	CACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGCACCAGG	1020
Db	961	CACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGCACCAGG	1020
Qy	1021	ACCTTGTCCGCCACCGCCACCACCACCAGACCTTCAAAACCCACCC	1080
Db	1021	ACCTTGTCCGCCACCACCACCACCACCACCACCCACCCCTTCTTTAGGACC	1080
Qу	1081	TGCTGGTGACAACCCCCTGGAGCTGAGTAGGATTCCTGATGAAAACTGCCAGATTAACAG	1140
Db	1081	TGCTGGTGACAACCCCCTGGAGCTGAGTAGGATTCCTGATGAAAACTGCCAGATTAACAG	1140
Qу	1141	ATATGGCCACTTTCAAGCCACCATCACAATTGTAGAGGGAATCTTAGAGGTTAACATCAT	1200
Db	1141	ATATGGCCACTTCAAGCCACCATCACAATTGTAGAGGGAATCTTAGAGGTTAACATCAT	1200
Qу	1201	CCAGATGACAGACGTCCTGATGCCGGTGCCATGGCCTGAAAGCTCCCTAATAGACTTTGT	1260
Db	1201	CCAGATGACAGACGTCCTGATGCCGGTGCCATGGCCTGAAAGCTCCCTAATAGACTTTGT	1260
Qу	1261	CGTGACCTGCCAAGGGAGCATTCCCACGGAGGTCTGTACCATCATTTCTGACCCCACCTG	1320
Db	1261	CGTGACCTGCCAAGGGAGCATTCCCACGGAGGTCTGTACCATCATTTCTGACCCCACCTG	1320
Qу	1321	CGAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGGATGAGATGTGTCTGCTGAC	1380
Db	1321	CGAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGATGAGATGTGTCTGCTGAC	1380
Qу	1381	TGTGAGACGAACCTTCAATGGGTCTGGGACGTACTGTGTGAACCTCACCCTGGGGGATGA	1440
Db	1381	TGTGAGACGAACCTTCAATGGGTCTGGGACGTACTGTGTGAACCTCACCCTGGGGGATGA	1440
Qv	1441	CACAAGCCTGGCTCTCACGAGCACCCTGATTTCTGTTCCTGACAGAGACCCAGCCTCGCC	1500

Db	1441	CACAAGCCTGGCTCTCACGAGCACCCTGATTTCTGTTCCTGACAGAGACCCAGCCTCGCC	1500
Qу	1501	TTTAAGGATGGCAAACAGTGCCCTGATCTCCGTTGGCTGCTTGGCCATATTTGTCACTGT	1560
Db	1501	TTTAAGGATGGCAAACAGTGCCCTGATCTCCGTTGGCTGCTTGGCCATATTTGTCACTGT	1560
Qу	1561	GATCTCCCTCTTGGTGTACAAAAACACAAGGAATACAACCCAATAGAAAATAGTCCTGG	1620
Db	1561	GATCTCCCTCTTGGTGTACAAAAACACAAGGAATACAACCCAATAGAAAATAGTCCTGG	1620
Qу	1621	GAATGTGGTCAGAAGCCAAAGGCCTGAGTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTT	1680
Db	1621	GAATGTGGTCAGAAGCCAAAGGCCTGAGTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTT	1680
Qу	1681	CCCGGGAAACCAGGAAAAGGATCCGCTACTCAAAAACCAAGAATTTAAAGGAGTTTCTTA	1740
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Qу	1741	AATTTCGACCTTGTTTCTGAAGCTCACTTTTCAGTGCCATTGATGTGAGATGTGCTGGAG	1800
Db	1741	AATTTCGACCTTGTTTCTGAAGCTCACTTTTCAGTGCCATTGATGTGAGATGTGCTGGAG	1800
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Qу	1861	TTGAATTTTTATAGGTTAAATGTCATTTTAGAGATGGGGAGAGGGATTATACTGCAGGC	1920
Db	1861	TTGAATTTTTATAGGTTAAATGTCATTTTAGAGATGGGGAGAGGGATTATACTGCAGGC	1920
Qу	1921	AGCTTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGCTTCTTTTCATTATTT	1980
Db	1921	AGCTTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGCTTCTTTTCATTATTT	1980
Qу	1981	TTTATGTTTCACTTATAAAGTCTTAGGTAACTAGTAGGATAGAAACACTGTGTCCCGAGA	2040
Db	1981	TTTATGTTTCACTTATAAAGTCTTAGGTAACTAGTAGGATAGAAACACTGTGTCCCGAGA	2040
Qу	2041	GTAAGGAGAAGCTACTATTGATTAGAGCCTAACCCAGGTTAACTGCAAGAAGAGGCGG	2100
Db	2041	GTAAGGAGAGAGCTACTATTGATTAGAGCCTAACCCAGGTTAACTGCAAGAAGAGGCGG	2100
Qу	2101	GATACTTCAGCTTTCCATGTAACTGTATGCATAAAGCCAATGTAGTCCAGTTTCTAAGA	2160
Db	2101	GATACTTTCAGCTTTCCATGTAACTGTATGCATAAAGCCAATGTAGTCCAGTTTCTAAGA	2160
Qу	2161	TCATGTTCCAAGCTAACTGAATCCCACTTCAATACACACTCATGAACTCCTGATGGAACA	2220
Db	2161	TCATGTTCCAAGCTAACTGAATCCCACTTCAATACACACTCATGAACTCCTGATGGAACA	2220
Qу	2221	ATAACAGGCCCAAGCCTGTGGTATGATGTGCACACTTGCTAGACTCAGAAAAAATACTAC	2280
Db	2221	ATAACAGGCCCAAGCCTGTGGTATGATGTGCACACTTGCTAGACTCAGAAAAAATACTAC	2280
Qy	2281	TCTCATAAATGGGTGGGAGTATTTTGGTGACAACCTACTTTGCTTGGCTGAGTGAAGGAA	2340

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Db
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Qу
      Db
      Qy
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         Db
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Qу
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         Db
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TD
XX
AC
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XX
DT
   26-AUG-2004
           (first entry)
XX
DE
   Human soft tissue sarcoma-upregulated DNA - SEQ ID 5658.
XX
KW
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KW
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XX
OS
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XX
PN
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XX
PD
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XX
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PR
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PA
XX
ΡI
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XX
DR
   WPI; 2004-441208/41.
XX
PT
   Early detection of soft tissue sarcoma comprises determining expression
```

PΤ of a gene in a first soft tissue sample and a normal soft tissue sample РT and comparing the gene expression, also useful in treating soft tissue PТ sarcoma. XX PS Example 2; SEQ ID NO 5658; 210pp; English. XX CC The invention relates to a novel method for detecting soft tissue sarcoma which comprises obtaining a first soft tissue sample from an individual CC CC and a normal soft tissue sample from the same or different individual, CC determining the expression of a gene in both samples and comparing the CC expression of the gene in both soft tissue samples, where a higher level of protein expression in the first soft tissue sample indicates the CC CC presence of soft tissue sarcoma. The method of the invention has CC cytostatic applications and may be useful for detecting soft tissue CC sarcoma, possibly via gene therapy or vaccine production. The nucleic CC acid sequences may be useful in diagnostic and screening applications. CC The current sequence is that of a human soft tissue sarcoma-upregulated CC DNA of the invention. The current sequence is not shown within the CC specification per se but was submitted in CD format by the inventor. XX SQ Sequence 2845 BP; 873 A; 617 C; 614 G; 741 T; 0 U; 0 Other; Query Match 96.6%; Score 2571.2; DB 12; Length 2845; Best Local Similarity 99.2%; Pred. No. 0: Matches 2615; Conservative 0; Mismatches 18; Indels 3; Gaps 3; 28 AACCTTGGTGCCTGCGTCGTGAGAATTCAGCATGGAATGTCTCTACTATTTCCTGGGAT 87 Qу Db 140 ACCTTGAGTGCCTGCGTCGGGAATTCAGCATGGAATGTCTCTACTATTTCCTGGGAT 199 88 TTCTGCTCCTGGCTGCAAGATTGCCACTTGATGCCGCCAAACGATTTCATGATGTGCTGG 147 Qy Db 200 TTCTGCTCCTGGCTGCAAGATTGCCACTTGATGCCGCCAAACGATTTCATGATGTGCTGG 259 Qу Db 208 ATGAAAATGACTGGAATGAAAAACTCTACCCAGTGTGGAAGCGGGGAGACATGAGGTGGA 267 Qy 320 ATGAAAATGACTGGAATGAAAAACTCTACCCAGTGTGGAAGCGGGGAGACATGAGGTGGA 379 Db 268 AAAACTCCTGGAAGGGAGGCCGTGTGCAGGCGGTCCTGACCAGTGACTCACCAGCCCTCG 327 Qу 380 AAAACTCCTGGAAGGGAGGCCGTGTGCAGGCGGTCCTGACCAGTGACTCACCAGCCCTCG 439 Db 328 TGGGCTCAAATATAACATTTGCGGTGAACCTGATATTCCCTAGATGCCAAAAGGAAGATG 387 Qу 440 TGGGCTCAAATATAACATTTGCGGTGAACCTGATATTCCCTAGATGCCAAAAGGAAGATG 499 Db 388 CCAATGGCAACATAGTCTATGAGAAGAACTGCAGAAATGAGGCTGGTTTATCTGCTGATC 447 Qу

> 448 CATATGTTTACAACTGGACAGCATGGTCAGAGGACAGTGACGGGGAAAATGGCACCGGCC 507

560 CATATGTTTACAACTGGACAGCATGGTCAGAGGACAGTGACGGGGAAAATGGCACCGGCC 619

Db

Qу

Db

Qу	508	AAAGCCATCATAACGTCTTCCCTGATGGGAAACCTTTTCCTCACCACCCCGGATGGAGAA	567
Db	620	AAAGCCATCATAACGTCTTCCCTGATGGGAAACCTTTTCCTCACCACCCCGGATGGAGAA	679
Qу	568	GATGGAATTTCATCTACGTCTTCCACACACTTGGTCAGTATTTCCAGAAATTGGGACGAT	627
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Qу	628	GTTCAGTGAGAGTTTCTGTGAACACAGCCAATGTGACACTTGGGCCTCAACTCATGGAAG	687
Db	740	GTTCAGTGAGAGTTTCTGTGAACACAGCCAATGTGACACTTGGGCCTCAACTCATGGAAG	799
Qу	688	TGACTGTCTACAGAAGACATGGACGGGCATATGTTCCCATCGCACAAGTGAAAGATGTGT	747
Db	800	TGACTGTCTACAGAAGACATGGACGGCCATATGTTCCCCATCGCACAAGTGAAAGATGTGT	859
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Db	860		919
Qу	808	CATCCGACGAAACCTTCC-CAAAGATCTCCCCATTATGTTTGATGTCCTGATTCATGATC	866
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Qу	867	CTAGCCACTTCCTCAATTATTCTACCATTAACTACAAGTGGAGCTTCGGGGATAATACTG	926
Db	980	CTAGCCACTTCCTCAATTATTCTACCATTAACTACAAGTGGAGCTTCGGGGGATAATACTG	1039
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Db	1040	GCCTGTTTGTTTCCACCAATCATACTGTGAATCACACGTATGTGCTCAATGGAACCTTCA	1099
Qу	987	GCCTTAACCTCACTGTGAAAGCTGCAGCACCAGGACCTTGTCCGCCACCGCCACCACCAC	1046
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Qу	1047	CCAGACCTTCAAAACCCACCCCTTCTTTAGGACCTGCTGGTGACAACCCCCTGGAGCTGA	1106
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Qу	1107	GTAGGATTCCTGATGAAAACTGCCAGATTAACAGATATGGCCACTTTCAAGCCACCATCA	1166
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Db	1520	GGACGTACTGTGTGAACCTCACCCTGGGGGATGACACAAGCCTGGCTCTCACGAGCACCC	1579
Qу	1467	TGATTTCTGTTCCTGACAGAGACCCAGCCTCGCCTTTAAGGATGGCAAACAGTGCCCTGA	1526
Db	1580	TGATTTCTGTTCCTGACAGAGACCCAGCCTCGCCTTTAAGGATGGCAAACAGTGCCCTGA	1639
Qу	1527	TCTCCGTTGGCTGCTTGGCCATATTTGTCACTGTGATCTCCCTCTTGGTGTACAAAAAC	1586
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OM nucleic - nucleic search, using sw model

Run on: February 21, 2005, 10:32:04; Search time 458 Seconds

(without alignments)

9506.839 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 2661

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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2	2547.8	95.7	2669	1	US-09-985-799-101	Sequence 101, App
3	2547.8	95.7	2669	1	US-09-977-371-91	Sequence 91, Appl
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5	2547.8	95.7	2669	1	US-08-594-031-91	Sequence 91, Appl
6	2547.8	95.7	2669	1	US-08-594-031-101	Sequence 101, App
7	1664.6	62.6	1683	4	US-09-943-075A-8	Sequence 8, Appli
8	1051.2	39.5	2303	4	US-09-197-970B-4	Sequence 4, Appli
9	1047.8	39.4	2213	3	US-09-383-586-27	Sequence 27, Appl
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13	545.6	20.5	619	3	US-09-123-912-105	Sequence 105, App
14	545.6	20.5	619	3	US-09-643-597-105	Sequence 105, App
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; Sequence 91, Application US/09985799
; Patent No. RE38392
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         APPLICANT: THOMPSON, Timothy C.
         TITLE OF INVENTION: METHOD FOR IDENTIFYING METASTATIC SEQUENCES
         NUMBER OF SEQUENCES: 175
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: BAKER & BOTTS, L.L.P.
              STREET: 1299 Pennsylvania Avenue, N.W.
              CITY: Washington
              STATE: DC
              COUNTRY: USA
              ZIP: 20004-2400
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Diskette
              COMPUTER: IBM Compatible
              OPERATING SYSTEM: DOS
              SOFTWARE: FastSEQ Version 1.5
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              APPLICATION NUMBER: US/09/985,799
              FILING DATE: 06-No. RE38392-2001
              CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: US/08/594,031
              FILING DATE: 30-JAN-1996
              APPLICATION NUMBER: 60/006,838
              FILING DATE: 16-NOV-1995
         ATTORNEY/AGENT INFORMATION:
              NAME: Remenick, James
              REGISTRATION NUMBER: 36,902
              REFERENCE/DOCKET NUMBER: 0A146-0110
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: 202-639-7700
              TELEFAX: 202-639-7890
              TELEX: <Unknown>
   INFORMATION FOR SEQ ID NO: 91:
         SEQUENCE CHARACTERISTICS:
              LENGTH: 2669 base pairs
              TYPE: nucleic acid
              STRANDEDNESS: single
              TOPOLOGY: linear
        MOLECULE TYPE: cDNA
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ANTI-SENSE: NO
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11298.729 Million cell updates/sec

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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Result		Query				
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1	2661	100.0	2661	13	US-10-039-272-1	Sequence 1, Appli
2	2661	100.0	2661	17	US-10-463-106-1	Sequence 1, Appli
3	2571.2	96.6	2845	18	US-10-723-860-5658	Sequence 5658, Ap
4	2559.2	96.2	2952	14	US-10-198-846-10843	Sequence 10843, A
5	2547.8	95.7	2669	10	US-09-525-978B-82	Sequence 82, Appl
6	2547.8	95.7	2669	17	US-10-172-118-779	Sequence 779, App
7	2547.8	95.7	2669	17	US-10-295-027-1041	Sequence 1041, Ap
8	2547.8	95.7	2669	17	US-10-342-887-779	Sequence 779, App
9	2547.8	95.7	2669	18	US-10-450-826-92	Sequence 92, Appl
10	2547.8	95.7	2669	18	US-10-723-860-1127	Sequence 1127, Ap
11	2531.6	95.1	2666	15	US-10-084-817-169	Sequence 169, App
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18	2485	93.4	2683	14	US-10-216-159A-41	Sequence 41, Appl
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US-10-039-272-1
; Sequence 1, Application US/10039272
; Publication No. US20020168653A1
; GENERAL INFORMATION:
  APPLICANT: RAMESHWAR, Pranela
  TITLE OF INVENTION: HEMATOPOIETIC GROWTH FACTOR INDUCIBLE NEUROKININ-TYPE
  FILE REFERENCE: 267/033 University of Medicine & Dentistry of New Jersey
  CURRENT APPLICATION NUMBER: US/10/039,272
  CURRENT FILING DATE: 2001-10-20
  PRIOR APPLICATION NUMBER: US 60/241,881
  PRIOR FILING DATE: 2000-10-20
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
   LENGTH: 2661
   TYPE: DNA
   ORGANISM: Homo sapiens
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 Best Local Similarity
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                                                      0;
                                                         Gaps
 Matches 2661; Conservative
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Db
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Db	361	TATTCCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAAGAACTGCA	420
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Db	601	GTCAGTATTTCCAGAAATTGGGACGATGTTCAGTGAGAGTTTCTGTGAACACAGCCAATG	660
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Db	661	TGACACTTGGGCCTCAACTCATGGAAGTGACTGTCTACAGAAGACATGGACGGCATATG	720
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Db	721	TTCCCATCGCACAAGTGAAAGATGTGTACGTGGTAACAGATCAGATTCCTGTGTTTGTGA	780
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Db	901	CAAGTGGAGCTTCGGGGATAATACTGGCCTGTTTGTTTCCACCAATCATACTGTGAATCA	960
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Db	961	CACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGCACCAGG	1020
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Db	1021	ACCTTGTCCGCCACCGCCACCACCACCAGACCTTCAAAACCCACCC	1080
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Db	1561	GATCTCCCTCTTGGTGTACAAAAAACACAAGGAATACAACCCAATAGAAAATAGTCCTGG	1620
Qу	1621	GAATGTGGTCAGAAGCCAAAAGCCTGAGTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTT	1680
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Qу		AGCTTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGCTTCTTTTCATTATTT	
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## RESULT 2

US-10-463-106-1

- ; Sequence 1, Application US/10463106
- ; Publication No. US20030202938A1
- ; GENERAL INFORMATION:
- ; APPLICANT: RAMESHWAR, Pranela
- ; TITLE OF INVENTION: HEMATOPOIETIC GROWTH FACTOR INDUCIBLE NEUROKININ-1 GENE
- ; FILE REFERENCE: 267/033 University of Medicine & Dentistry of New Jersey
- ; CURRENT APPLICATION NUMBER: US/10/463,106
- ; CURRENT FILING DATE: 2003-06-17

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PRIOR APPLICATION NUMBER: US 10/039,272
  PRIOR FILING DATE: 2001-10-20
  PRIOR APPLICATION NUMBER: US 60/241,881
  PRIOR FILING DATE: 2000-10-20
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: PatentIn version 3.1
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   TYPE: DNA
   ORGANISM: Homo sapiens
US-10-463-106-1
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 Query Match
                    100.0%; Score 2661;
 Best Local Similarity
                    100.0%; Pred. No. 0;
 Matches 2661; Conservative
                         0; Mismatches
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                                          Indels
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Db	1441	CACAAGCCTGGCTCTCACGAGCACCCTGATTTCTGTTCCTGACAGAGACCCAGCCTCGCC	1500
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Qу	2161	TCATGTTCCAAGCTAACTGAATCCCACTTCAATACACACTCATGAACTCCTGATGGAACA	2220
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Qу	2341	TGATATTCATATTCATTTATTCCATGGACATTTAGTTAGT	2400
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Db	2641		•

OM nucleic - nucleic search, using sw model

Run on: February 21, 2005, 10:29:04; Search time 7723 Seconds

(without alignments)

13115.243 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 2661

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100%

Listing first 45 summaries

Database : EST:\*

1: gb\_est1:\* 2: gb\_est2:\*

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3: gb_htc:*
4: gb_est3:*
5: gb_est4:*
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7: gb_est6:*
8: gb_gss1:*
9: gb_gss2:*
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ક

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result			Query				
No.		Score	Match	Length	DB	ID	Description
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	3	1664.8	62.6	1695	3	CR625459	CR625459 full-leng
	4	1617	60.8	1726	3	CR626032	CR626032 full-leng
	5	1049.8	39.5	3615	3	AK044764	AK044764 Mus muscu
	6	1046.6	39.3	2265	3	AK076347	AK076347 Mus muscu
С	7	1017.4	38.2	1106	5	BX397314	BX397314 BX397314
С	8	1013.6	38.1	1050	5	BX379978	BX379978 BX379978
	9	943.8	35.5	2431	3	AK079220	AK079220 Mus muscu
C	10	932.6	35.0	971	5	BX423077	BX423077 BX423077
С	11	926.6	34.8	1015	5	BX458448	BX458448 BX458448
	12	918	34.5	1029	5	BX406949	BX406949 BX406949
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	14	910.6	34.2	1063	5	BX336884	BX336884 BX336884
	15	906.4	34.1	1067	5	BX364871	BX364871 BX364871
	16	885.6	33.3	947	5	BX458449	BX458449 BX458449
	17	867.4	32.6	895	7	CF552020	CF552020 AGENCOURT
	18	864.4	32.5	949	5	BX423078	BX423078 BX423078
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#### ALIGNMENTS

RESULT 1 BC025297

LOCUS BC025297 2636 bp mRNA linear HTC 08-MAR-2002

DEFINITION Homo sapiens, glycoprotein (transmembrane) nmb, clone

IMAGE: 4877773, mRNA.

ACCESSION BC025297

VERSION BC025297.1 GI:19264140

KEYWORDS HTC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 2636)

AUTHORS Strausberg, R.
TITLE Direct Submission

JOURNAL Submitted (05-MAR-2002) National Institutes of Health, Mammalian

Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,

USA

REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov

COMMENT Contact: MGC help desk

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP

cDNA Library Preparation: Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Genome Sequence Centre, BC Cancer Agency, Vancouver, BC, Canada

info@bcgsc.bc.ca

Steven Jones, Jennifer Asano, Ian Bosdet, Yaron Butterfield, Susanna Chan, Readman Chiu, Chris Fjell, Erin Garland, Ran Guin, Letticia Hsiao, Martin Krzywinski, Reta Kutsche, Oliver Lee, Soo Sen Lee, Victor Ling, Carrie Mathewson, Candice McLeavy, Steven Ness, Pawan Pandoh, Anna-Liisa Prabhu, Parvaneh Saeedi, Jacqueline Schein, Duane Smailus, Michael Smith, Lorraine Spence, Jeff Stott, Michael Thorne, Miranada Tsai, Natasja van den Bosch, Jill Vardy, George Yang, Scott Zuyderduyn, Marco Marra.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 42 Row: i Column: 5

This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4505404 This clone has the following problem: frame shifted.

FEATURES

Location/Qualifiers

source

1. .2636

/organism="Homo sapiens"

/mol\_type="mRNA"

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/note="Vector: pOTB7"
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#### ORIGIN

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 Best Local Similarity
                 99.1%;
                      Pred. No. 0;
 Matches 2595; Conservative
                        Mismatches
                      0;
                                 20;
                                     Indels
                                           3;
                                              Gaps
                                                    3;
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Qу
         20 ACCTTGAGTGCCTGCGTCCGTGAGAATTCAGCATGGAATGTCTCTACTATTTCCTGGGAT 79
Db
       88 TTCTGCTCCTGGCTGCAAGATTGCCACTTGATGCCGCCAAACGATTTCATGATGTGCTGG 147
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      Qу
         Db
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Qy	808	CATCCGACGAAACCTTCC-CAAAGATCTCCCCATTATGTTTGATGTCCTGATTCATGATC	866
Db	800	CATCCGACGAAACCTTCCTCAAAGATCTCCCCATTATGTTTGATGTCCTGATTCATGATC	859
Qу	867	CTAGCCACTTCCTCAATTATTCTACCATTAACTACAAGTGGAGCTTCGGGGATAATACTG	926
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Qу	927	GCCTGTTTGTTTCCACCAATCATACTGTGAATCACACGTATGTGCTCAATGGAACCTTCA	986
Db	920		979
Qy	987	GCCTTAACCTCACTGTGAAAGCTGCAGCACCAGGACCTTGTCCGCCACCGCCACCACCAC	1046
Db	980		1039
Qу	1047	CCAGACCTTCAAAACCCACCCCTTCTTTAGGACCTGCTGGTGACAACCCCCTGGAGCTGA	1106
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Db	1160	CAATTGTAGAGGGAATCTTAGAGGTTAACATCATCCAGATGACAGACGTCCTGATGCCGG	1219
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QУ	1287	CGGAGGTCTGTACCATCATTTCTGACCCCACCTGCGAGATCACCCAGAACACAGTCTGCA	1346
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QУ	1407	GGACGTACTGTGTGAACCTCACCCTGGGGGATGACACAAGCCTGGCTCTCACGAGCACCC	1466
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Db	1460	TGATTTCTGTTCCTGACAGAGACCCAGCCTCGCCTTTAAGGATGGCAAACAGTGCCCTGA	1519
Ov	, 1527	TCTCCGTTGGCTGCTTGGCCATATTTGTCACTGTGATCTCCCTCTTGGTGTACAAAAAAC	1586

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Qу		AAAAGCAACTTAGCAAGGCTTCTTTTCATTATTTTTTTTT	
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Qу		GAGCCTAACCCAGGTTAACTGCAAGAAGAGGCGGGATACTTTCAGCTTTCCATGTAACTG	
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ΟУ		TATGCATAAAGCCAATGTAGTCCAGTTTCTAAGATCATGTTCCAAGCTAACTGAATCCCA	
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Qу	2607	-AAAATGAGGGAAGACAAAAAAAAAAAAAAAAAAAA 2643	
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# GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - protein search, using frame plus n2p model Run on: February 18, 2005, 22:03:33; Search time 355 Seconds (without alignments) 5798.137 Million cell updates/sec Title: US-10-039-272-1 Perfect score: 4850 Sequence: Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fqapop 6.0, Fgapext 7.0 6.0 , Delext 7.0 Delop 2105692 seqs, 386760381 residues Searched: Total number of hits satisfying chosen parameters: 4211384 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ n2p.model -DEV=xlp Q=/cgn2 1/USPTO\_spool p/US10039272/runat\_18022005\_095204\_14690/app\_query.fasta\_1 -DB=A\_Geneseq\_16Dec04 -QFMT=fastan -SUFFIX=rag -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US10039272 @CGN 1 1 398 @runat 18022005 095204 14690 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120 -WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 Database : A Geneseq 16Dec04:\* 1: geneseqp1980s:\* 2: geneseqp1990s:\* 3: geneseqp2000s:\*

Pred. No. is the number of results predicted by chance to have a

4: geneseqp2001s:\*
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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6	2999	61.8	560	3	AAB11329	Aab11329 Human lun
. 7	2999	61.8	560	5	ABB78200	Abb78200 Amino aci
8	2999	61.8	560	5	ABB74961	Abb74961 Human lun
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10	2999	61.8	560	6	ABU56592	Abu56592 Lung canc
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33	2979	61.4		7 7	ADB83532	Adb80638 Novel hum
34	2979	61.4		7	ADB80638 ADB73179	Adb73179 Novel hum
35	2979	61.4	572 572			Adb78261 Novel hum
36	2979	61.4			ADB/0201 ADB84909	Adb84909 Human PRO
37	2979	61.4			ADB78015	Adb78015 Novel hum
38	2979 2979	61.4 61.4			ADB70013	Adb87081 Human PRO
39 40	2979	61.4			ADB84663	Adb84663 Human PRO
40	2979	61.4			ADB83778	Adb83778 Novel hum
41	2979	61.4			ADB72933	Adb72933 Novel hum
43	2979	61.4			ADC36771	Adc36771 Human PRO
44	2979	61.4			ADC21761	Adc21761 Human PRO
45	2979	61.4			ADC49792	Adc49792 Novel hum
3.0	20.0	51.1		•	·	•

OM nucleic - protein search, using frame plus n2p model Run on: February 18, 2005, 22:15:00; Search time 73 Seconds (without alignments) 5442.224 Million cell updates/sec Title: US-10-039-272-1 Perfect score: 4850 Sequence: BLOSUM62 Scoring table: Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext Fgapop 6.0, Fgapext 7.0 6.0 , Delext 7.0 Delop 513545 segs, 74649064 residues Searched: 1027090 Total number of hits satisfying chosen parameters: Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ n2p.model -DEV=xlp Q=/cgn2 1/USPTO\_spool\_p/US10039272/runat\_18022005\_095206\_14721/app\_query.fasta\_1 -DB=Issued\_Patents AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US10039272 @CGN 1\_1\_72\_@runat 18022005 095206\_14721 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database: Issued Patents AA:\*

1: /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*
2: /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*
3: /cgn2\_6/ptodata/1/iaa/6A\_COMB.pep:\*
4: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
5: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		8				
Result		Query				
No.	Score	Match	Length	DB 	ID	Description
1	2999	61.8	560	1	US-09-985-799-90	Sequence 90, Appl
2	2999	61.8	560	1	US-09-977-371-90	Sequence 90, Appl
3	2999	61.8	560	1	US-08-594-031-90	Sequence 90, Appl
4	2999	61.8	560	4	US-09-643-597-225	Sequence 225, App
5	2999	61.8	560	4	US-09-480-884A-225	Sequence 225, App
6	2999	61.8	560	4	US-09-542-615A-225	Sequence 225, App
7	2999	61.8	560	4	US-09-606-421B-225	Sequence 225, App
8	2999	61.8	560	4	US-09-476-496A-225	Sequence 225, App
9	2999	61.8	560	4	US-09-630-940B-225	Sequence 225, App
10	2999	61.8	560	4	US-09-943-075A-6	Sequence 6, Appli
11	2170	44.7	574	3	US-09-383-586-36	Sequence 36, Appl
12	2170	44.7	574	4	US-09-823-038A-36	Sequence 36, Appl
13	2170	44.7	574	4	US-09-943-075A-5	Sequence 5, Appli
14	2152	44.4	572	4	US-09-197-970B-5	Sequence 5, Appli
15	2136	44.0	572	4	US-09-943-075A-2	Sequence 2, Appli
16	950.5	19.6	376	1	US-09-985-799-100	Sequence 100, App
17	950.5	19.6	376	1	US-09-985-799-102	Sequence 102, App
18	950.5	19.6	376	1	US-09-977-371-100	Sequence 100, App
19	950.5	19.6	376	1	US-09-977-371-102	Sequence 102, App
20	950.5	19.6	376	1	US-08-594-031-100	Sequence 100, App
21	950.5	19.6	376	1	US-08-594-031-102	Sequence 102, App
22	593	12.2	661	2	US-08-417-174-121	Sequence 121, App
23	593	12.2	661	3	US-09-267-439-121	Sequence 121, App
24	593	12.2	661	4	US-08-388-852B-2	Sequence 2, Appli
25	593	12.2	661	4	US-09-073-138-121	Sequence 121, App
26	592	12.2	661	2	US-08-417-174-27	Sequence 27, Appl
27	592	12.2	661	2	US-08-231-565A-27	Sequence 27, Appl
28	592	12.2	661	2	US-09-007-961-27	Sequence 27, Appl
29	592	12.2	661	3	US-09-267-439-27	Sequence 27, Appl
30	592	12.2	661	4	US-09-073-138-27	Sequence 27, Appl
31	574.5	11.8	668	1	US-07-891-942G-6	Sequence 6, Appli
32	327.5	6.8	460		US-09-949-016-8029	Sequence 8029, Ap
33	238.5	4.9	190	4	US-08-388-852B-35	Sequence 35, Appl
34	236	4.9	202	4	US-08-388-852B-38	Sequence 38, Appl
35	233.5	4.8	192	4	US-08-388-852B-37	Sequence 37, Appl
36	233	4.8	197	4		Sequence 36, Appl
37	124	2.6			US-09-985-799 <b>-</b> 98	Sequence 98, Appl
38	124	2.6			US-09-977-371-98	Sequence 98, Appl
39	124	2.6			US-08-594-031-98	Sequence 98, Appl
40	120	2.5		4	US-09-784-358-8	Sequence 8, Appli
41	120	2.5			US-09-784-358-12	Sequence 12, Appl
42	120	2.5			US-09-784-358-2	Sequence 2, Appli
43	112.5	2.3			US-09-248-796A-26860	Sequence 26860, A
44	111	2.3			US-09-976-594-64	Sequence 64, Appl
45	111	2.3	525	4	US-09-919-039-62	Sequence 62, Appl

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```
Run on:
               February 18, 2005, 22:44:56; Search time 303.5 Seconds
                                          (without alignments)
                                          5738.309 Million cell updates/sec
Title:
               US-10-039-272-1
Perfect score:
Sequence:
               Scoring table:
               BLOSUM62
               Xgapop 10.0 , Xgapext 0.5
               Ygapop 10.0 , Ygapext
                                     0.5
               Fgapop 6.0 , Fgapext
                                     7.0
               Delop
                       6.0 , Delext
                                      7.0
               1380268 seqs, 327241040 residues
Searched:
Total number of hits satisfying chosen parameters:
                                                  2760536
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
                Maximum Match 100%
                Listing first 45 summaries
Command line parameters:
-MODEL=frame+ n2p.model -DEV=xlp
Q=/cgn2 1/USPTO spool p/US10039272/runat 18022005 095208 14781/app query.fasta 1
-DB=Published Applications AA -QFMT=fastan -SUFFIX=rapb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US10039272 @CGN 1 1 393 @runat 18022005 095208 14781
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
               Published Applications AA:*
Database :
               1: /cgn2 6/ptodata/2/pubpaa/US07 PUBCOMB.pep:*
                   /cgn2 6/ptodata/2/pubpaa/PCT NEW PUB.pep:*
               2:
                   /cgn2 6/ptodata/2/pubpaa/US06 NEW PUB.pep:*
               3:
                   /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
               4:
               5:
                   /cgn2 6/ptodata/2/pubpaa/US07 NEW PUB.pep:*
                   /cgn2_6/ptodata/2/pubpaa/PCTUS PUBCOMB.pep:*
               6:
                   /cgn2 6/ptodata/2/pubpaa/US08 NEW PUB.pep:*
               7:
                  /cgn2 6/ptodata/2/pubpaa/US08 PUBCOMB.pep:*
                  /cgn2 6/ptodata/2/pubpaa/US09A PUBCOMB.pep:*
               10: /cgn2 6/ptodata/2/pubpaa/US09B PUBCOMB.pep:*
                    /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
               11:
               12: /cgn2_6/ptodata/2/pubpaa/US09 NEW PUB.pep:*
               13: /cgn2 6/ptodata/2/pubpaa/US10A PUBCOMB.pep:*
               14: /cgn2 6/ptodata/2/pubpaa/US10B PUBCOMB.pep:*
               15: /cgn2 6/ptodata/2/pubpaa/US10C PUBCOMB.pep:*
```

16: /cgn2 6/ptodata/2/pubpaa/US10D PUBCOMB.pep:\*

```
17: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep:*
19: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

		0.			SUMMATES	
		8				
Result	_	Query				
No.	Score	Match	Length	DB	ID	Description
	2000					
1	2999	61.8	560	9	US-09-735-705-225	Sequence 225, App
2	2999	61.8	560	9	US-09-850-716A-225	Sequence 225, App
3	2999	61.8	560	9	US-09-897-778-225	Sequence 225, App
4	2999	61.8	560	9	US-09-943-075A-6	Sequence 6, Appli
5	2999	61.8	560	13	US-10-039-272-2	Sequence 2, Appli
6	2999	61.8	560	14	US-10-007-700-225	Sequence 225, App
7	2999	61.8	560	14	US-10-117-982-225	Sequence 225, App
8	2999	61.8	560	15	US-10-463-106-2	Sequence 2, Appli
9	2999	61.8	560	15	US-10-295-027-1258	Sequence 1258, Ap
10	2999	61.8	560	15	US-10-313-986-225	Sequence 225, App
11	2999	61.8	560	15	US-10-309-290-152	Sequence 152, App
12	2999	61.8	560	16	US-10-408-765A-466	Sequence 466, App
13	2979	61.4	572	14	US-10-227-884-42	Sequence 42, Appl
14	2979	61.4	572	14	US-10-230-163-42	Sequence 42, Appl
15	2979	61.4	572	14	US-10-230-338-42	Sequence 42, Appl
16	2979	61.4	572	14	US-10-218-631-42	Sequence 42, Appl
17	2979	61.4	572	14	US-10-230-414-42	Sequence 42, Appl
' 18	2979	61.4	572	14	US-10-232-224-42	Sequence 42, Appl
19	2979	61.4	572	14	US-10-216-159A-42	Sequence 42, Appl
20	2979	61.4	572	14	US-10-218-849-42	Sequence 42, Appl
21	2979	61.4	572	14	US-10-227-873-42	Sequence 42, Appl
22	2979	61.4	572	14	US-10-227-883-42	Sequence 42, Appl
23	2979	61.4	572	14	US-10-219-076-42	Sequence 42, Appl
24	2979	61.4	572	14	US-10-230-434-42	Sequence 42, Appl
25	2979	61.4	572	14	US-10-219-003-42	Sequence 42, Appl
26	2979	61.4	572	14	US-10-219-075-42	Sequence 42, Appl
27	2979	61.4	572	14	US-10-219-464-42	Sequence 42, Appl
28	2979	61.4	572	14	US-10-219-466-42	Sequence 42, Appl
29	2979	61.4	572	14	US-10-219-479-42	Sequence 42, Appl
30	2979	61.4	572	14	US-10-219-481-42	Sequence 42, Appl
31	2979	61.4	572	14	US-10-230-260-42	Sequence 42, Appl
32	2979	61.4	572	14	US-10-232-231-42	Sequence 42, Appl
33	2979	61.4	572	14	US-10-232-231-42	Sequence 42, Appl
34	2979	61.4	572	14	US-10-216-165-42	Sequence 42, Appl
35	2979	61.4	572	14	US-10-218-956-42	Sequence 42, Appl
35 36	2979	61.4	572	14	US-10-219-468-42	Sequence 42, Appl
			572			
37	2979 2979	61.4 61.4	572	14 14	US-10-219-478-42 US-10-219-536-42	Sequence 42, Appl
38						Sequence 42, Appl
39	2979	61.4	572	14	US-10-233-205-42	Sequence 42, Appl
40	2979	61.4	572	14	US-10-219-072-42	Sequence 42, Appl
41	2979	61.4	572	14	US-10-219-470-42	Sequence 42, Appl
42	2979	61.4	572	14	US-10-219-474-42	Sequence 42, Appl
43	2979	61.4	572	14	US-10-219-524-42	Sequence 42, Appl

```
44 2979 61.4 572 14 US-10-219-528-42 Sequence 42, Appl 45 2979 61.4 572 14 US-10-227-880-42 Sequence 42, Appl
```

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OM nucleic - protein search, using frame plus n2p model

Run on: February 18, 2005, 22:06:53; Search time 91 Seconds

(without alignments)

5627.095 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 4850

Scoring table: BLOSUM62

Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 566832

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=frame+\_n2p.model -DEV=xlp

Q=/cgn2\_1/USPTO\_spool\_p/US10039272/runat\_18022005\_095205\_14708/app\_query.fasta\_1 .2823

-DB=PIR 79 -QFMT=fastan -SUFFIX=rpr -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0

-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45

-DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL

-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000

-USER=US10039272 @CGN 1 1 135 @runat 18022005 095205 14708 -NCPU=6 -ICPU=3

-NO MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG

-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6

-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database: PIR 79:\*

1: pir1:\*

2: pir2:\*

3: pir3:\*

4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

			8				
Resu			Query				
N	lo.	Score	Match	Length	DB	ID	Description
	1	2999	61.8	560	2	 I38065	gene NMB protein -
	2	635	13.1	626	2	S53871	Pmel 17 protein -
	3	593.5	12.2	662	2	I38400	melanoma-associate
	4	588.5	12.1	668	2	A41234	melanocyte-specifi
	5	436.5	9.0	491	2	A49179	melanoma antigen h
	6	135	2.8	446	2	T07907	hydroxyproline-ric
	7	129	2.7	926	1	A41105	protein-tyrosine-p
	8	118	2.4	2869	2	T18518	apolipoprotein(a)
	9	116.5	2.4	555	2	S21766	dihydrolipoamide S
	10	114	2.4	2395	1	S50820	surface protein ty
	11	113	2.3	1541	2	T02831	AAA protein L4171.
	12	112.5	2.3	457	2	I55976	dihydrolipoamide S
	13	111.5	2.3	2946	2	T15840	hypothetical prote
	14	111	2.3	525	1	KGHUGH	histidine-rich gly
	15	110.5	2.3	1874	1	JQ0533	genome polyprotein
	16	109.5	2.3	492	2	C96521	protein F21D18.18
	17	109	2.2	1737	2	A59235	unconventional myo
	18	108.5	2.2	348	2	AB3260	hypothetical membr
	19	108.5	2.2	588	2	T45564	hypothetical prote
	20	107.5	2.2	768	2	A87722	protein ZC123.1 [i
	21	107.5	2.2	1208	2	T27822	hypothetical prote
	22	106	2.2	658	2	T08153	cysteine proteinas
	23	106	2.2	1537	2	S53465	flocculation prote
	24	106	2.2	1585	2	T31611	hypothetical prote
C	25	105	2.2	499	2	S52422	chitinase (EC 3.2.
	26	104.5	2.2	4006	2	T09070	probable tenascin
	27	· 104	2.1	435	2	D41602	transcription fact
	28	103	2.1	626	1	NBHUIA	platelet glycoprot
	29	103	2.1	921	2	A33718	retinoblastoma pro
	30	103	2.1		2	C64483	hypothetical prote
С	31	102.5	2.1	394	2	E82572	ABC transporter so
	32	102.5	2.1	826	2	G90283	hypothetical prote
	33	102.5	2.1	979	2	A35913	regulatory factor
	34	102	2.1		2	T29150	hypothetical prote
	35	102	2.1	393	2	T33103	lin-1 protein - Ca
	36	102	2.1	1213	2		limb deformity (ld
	37	102	2.1		2	T21560	hypothetical prote
	38	101.5	2.1		2	D81716	hypothetical prote
	39	101.5	2.1		2	T21371	hypothetical prote
	40	101	2.1		2	T23694	hypothetical prote
	41	101	2.1		2	S26058	probable transform
	42	100.5	2.1		2	T07176	extensin homolog - platelet-derived g
	43	100.5	2.1		2	T30815	twitching motility
	44	100	2.1		2	AB2222 I38344	titin, cardiac mus
	45	100	2.1	26926	1	130344	cicin, cardiac mus

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OM nucleic - protein search, using frame plus n2p model

Run on: February 18, 2005, 22:04:28; Search time 445 Seconds

(without alignments)

6124.237 Million cell updates/sec

Title: US-10-039-272-1

Perfect score: 4850

Scoring table: BLOSUM62

Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 3224756

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=frame+ n2p.model -DEV=xlp

Q=/cgn2\_1/USPTO\_spool\_p/US10039272/runat\_18022005\_095205\_14696/app\_query.fasta\_1 .2823

-DB=UniProt 03 -QFMT=fastan -SUFFIX=rup -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0

-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45

-DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL

-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000

-USER=US10039272 @CGN 1 1 518 @runat 18022005 095205 14696 -NCPU=6 -ICPU=3

-NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG

-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6

-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database: UniProt 03:\*

1: uniprot\_sprot:\*
2: uniprot trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result Query

No. Score Match Length DB ID Description

1	2999	61.8	560	1	NMB_HUMAN	Q14956	homo sapien
2	2983	61.5	572	2	Q8N1A1	Q8n1a1	homo sapien
3	2979	61.4	572	2	Q6UVX1	Q6uvx1	homo sapien
4	2170	44.7	574	2	Q99P91	Q99p91	mus musculu
5	2170	44.7	574	2	Q8BVV9		mus musculu
6	2170	44.7	574	2	Q9QXA0	Q9qxa0	mus musculu
7	2166	44.7	574	2	Q8BXL4	Q8bx14	mus musculu
8	2152	44.4	572	2	Q6P7C7	Q6p7c7	rattus norv
9	2136	44.0	572	2	Q9QZF6	Q9qzf6	rattus norv
10	2015	41.5	526	2	Q8BVA0		mus musculu
11	1563.5	32.2	559	1	QNR COTJA	Q90372	coturnix co
12	1029	21.2	206	2	Q96F58	Q96f58	homo sapien
13	1022	21.1	206	2	Q8IXJ5	Q8ixj5	homo sapien
14	711.5	14.7	721	2	Q6DDN6		xenopus lae
15	704.5	14.5	746	2	Q6DIR2	Q6dir2	xenopus tro
16	644.5	13.3	626	2	Q9CZB2	Q9czb2	mus musculu
17	635	13.1	626	1	PM17 MOUSE	Q60696	mus musculu
18	631.5	13.0	760	2	$Q6DW\overline{6}4$	Q6dw64	gallus gall
19	630	13.0	733	2	093391		coturnix co
20	629.5	13.0	764	2	Q6DW63	Q6dw63	gallus gall
21	628	12.9	763	2	Q6DW62		gallus gall
22	620.5	12.8	788	2	Q6DW65		gallus gall
23	617	12.7	762	1	P115 CHICK	Q98917	gallus gall
24	612	12.6	783	2	Q6DW60		gallus gall
25	609	12.6	759	2	Q6DW61		gallus gall
26	593	12.2	661	1	PM17 HUMAN		homo sapien
27	436.5	9.0	491	1	PM17 BOVIN		bos taurus
28	372	7.7	461	2	097884	097884	equus cabal
29	247.5	5.1	236	2	Q9QY67		mus musculu
30	198.5	4.1	423	2	Q8N0W9	Q8n0w9	homo sapien
31	198.5	4.1	435	2	Q8N3G9	Q8n3g9	homo sapien
32	192	4.0	397	2	Q8N3R2	Q8n3r2	homo sapien
33	167	3.4	141	2	Q9QY70	Q9qy70	mus musculu
34	154.5	3.2	419	2	Q6NXM3	Q6nxm3	mus musculu
35	151	3.1	354	2	Q8IY46 .	Q8iy46	homo sapien
36	141.5	2.9	906	2	Q8TPY9	Q8tpy9	methanosarc
37	135	2.8	446	2	022458	022458	chlamydomon
38	134.5	2.8	1817	2	Q8TI59	Q8ti59	methanosarc
39	131	2.7	879	2	Q8PWJ6	Q8pwj6	methanosarc
40	129.5	2.7	1131	2	Q75DJ5	Q75dj5	ashbya goss
41	129	2.7	926	1	PTN4_HUMAN	P29074	homo sapien
42	128.5	2.6	688	2	Q8TR88	Q8tr88	methanosarc
43	127.5	2.6	3988	2	Q8TPZ1	Q8tpz1	methanosarc
44	126	2.6	603	2	Q7U5X8	Q7u5x8	synechococc
45	125.5	2.6	881	2	Q6H7U3	Q6h7u3	oryza sativ